

# NON-VOLATILE MEMORY DEVICE HAVING DUAL GATE AND METHOD OF FORMING THE SAME

## ABSTRACT OF THE DISCLOSURE

5           A non-volatile memory device including a control gate pattern  
having a tunnel insulation pattern, a trap-insulation pattern, a blocking  
insulation pattern and a control gate electrode, which are stacked on a  
semiconductor substrate. A selection gate pattern is disposed on the  
semiconductor substrate at one side of the control gate pattern. A gate  
10   insulation pattern is interposed between the selection gate electrode and  
the semiconductor substrate, and between the selection gate electrode  
and the control gate pattern. A cell channel region includes a first  
channel region defined in the semiconductor substrate under the  
selection gate electrode and a second channel region defined in the  
15   semiconductor substrate under the control gate electrode.